LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A short pulse laser arrangement with preferably passive mode-locking, comprising a resonator ~~(12)~~ containing a laser crystal ~~(14)~~ as well as several mirrors ~~(M1-M7; 22, 23, OC)~~, one of which forms a pump beam coupling-in mirror ~~(22)~~ and one of which forms a laser beam out-coupling mirror ~~(OC)~~, and a multiple reflexion telescope ~~(18)~~ enlarging the resonator length, the resonator ~~(12)~~ in operation having a positive averaged dispersion over a wavelength range concerned, ~~characterized in that~~ wherein the adjustment of the positive averaged dispersion of the resonator ~~(12)~~ is effected by means of the mirrors ~~(M1-M7, 22, 23, OC)~~ of the resonator ~~(12)~~, at least a few of which are designed as dispersive mirrors.

2. (Currently Amended) A short pulse laser arrangement according to claim 1, ~~characterized in that~~ wherein the dispersion of the resonator ~~(12)~~ averaged over the wavelength range concerned is adjusted in a range of between 0 and 100 fs^2.

3. (Currently Amended) A short pulse laser arrangement according to claim 2, ~~characterized in that~~ wherein the averaged dispersion ranges between 0 and 50 fs^2.

4. (Currently Amended) A short pulse laser arrangement according to ~~any one of claims 1 to 3,~~

~~characterized in that~~ claim 1, wherein all the mirrors of the resonator ~~(12)~~ are dispersive mirrors.

5. (Currently Amended) A short pulse laser arrangement according to claim 4, ~~characterized in that~~ wherein all the mirrors of the resonator ~~(12)~~ have a negative dispersion.

6. (Currently Amended) A short pulse laser arrangement according to ~~any one of claims 1 to 5, characterized in that~~ claim 1, wherein the mirrors ~~(25, 26)~~ of the multiple-reflexion telescope ~~(18)~~ are dispersive mirrors.

7. (Currently Amended) A short pulse laser arrangement according to claim 6, ~~characterized in that~~ wherein the mirrors ~~(25, 26)~~ of the telescope ~~(18)~~ have a negative dispersion.

8. (Currently Amended) A short pulse laser arrangement according to ~~any one of claims 1 to 7, characterized in that~~ claim 1, wherein for an additional dispersion fine adjustment, a pair of glass wedges ~~(30)~~ with positive dispersion is arranged in the resonator ~~(12)~~.

9.(Currently Amended) A short pulse laser arrangement according to ~~any one of claims 1 to 8, characterized in that~~ claim 1, wherein the Kerr-lens mode-locking principle is used for passive mode-locking.

10. (Currently Amended) A short pulse laser arrangement according to ~~any one of claims 1 to 8, characterized in that~~ claim 1, wherein a saturable absorber ~~(M4)~~ is provided for passive mode-locking.

11. (Currently Amended) The use of a short pulse laser arrangement according to ~~any one of claims 1 to 10~~ claim 1 for material processing